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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,309	03/25/2004	Naoki Hasegawa	20-137	5487

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Arnold International
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Great Falls, VA 22066

EXAMINER

SMITH, PHILIP ROBERT

ART UNIT PAPER NUMBER

3739

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/808,309

Applicant(s)

HASEGAWA, NAOKI

Examiner

Philip R. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1,2 and 8-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date none.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Restrictions

- [01] Claims 1-2 & 8-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group.

Claim Rejections - 35 USC § 102

- [02] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- [03] Claims 3-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Tokuda (2004/0097791).

- [04] With regard to claims 3-4: Tokuda discloses an endoscope comprising:

[04a] an observation unit or image pickup unit ("image pick-up device 37h,"

[0119]) having an observation field of view and an in-focus position which forms a magnified image of an object in the observation field of view such that the absolute value of the image scale factor is larger than 1 ("high magnification lens group 37g," [0118]); and

[04b] an illumination unit ("light guide 37i," [0118]) that illuminates an illumination field;

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[04c] wherein the observation field of view of the objective optical system at the in-focus position of the objective optical system does not overlap said illumination field ("the endoscope edge portion 18 is touched to the living body B," [0123] as shown in Figure 12).

[05] With regard to claim 5: As noted above, Tokuda discloses an endoscopic illumination method in which a light source that does not directly illuminate an observation field of view illuminates an area of tissue ("living body B," [0123]) outside the observation field of view ("concerned portion B'," [0123], and said area of tissue scatters the light from the light source so as to illuminate the observation field of view ("0 to 100 μ m from the microscopic observing window 24," [0123]).

[06] With regard to claims 6 & 7: Tokuda discloses an endoscope which is inherently capable of observing epithelial cells of living tissue according to a method comprising: a step in which the illumination system of the endoscope illuminates the underlying parenchymal tissues of the epithelial cells; and a step in which the illumination light emitted from the illumination system is scattered and reflected by the parenchymal tissues ("turned in the living body B") underlying the epithelial cells to illuminate the epithelial cells ("microscopically observed," [0123]).

[07] Claims 3-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Furnish (2004/0092829).

[08] With regard to claims 3-4: Furnish discloses an endoscope comprising:

[08a] an observation unit or image pickup unit (comprising "collection mirror 82,"

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- [0068], "lens assembly 130" & "collection fiber 20," [0066]) having an observation field of view and an in-focus position which forms a magnified image of an object in the observation field of view such that the absolute value of the image scale factor is larger than 1 (see Figure 22); and
- [08b] an illumination unit (comprising "delivery fiber 18" & "delivery mirror 60," [0046]) that illuminates an illumination field ("illumination spot 32," [0039];
- [08c] wherein the observation field of view ("ellipse 128," [0064]) of the objective optical system at the in-focus position of the objective optical system does not overlap said illumination field ("re-entrant zone 70," [0065], shown in Figure 21).
- [09] With regard to claim 5: As noted above, Furnish discloses an endoscopic illumination method in which a light source that does not directly illuminate an observation field of view illuminates an area of tissue outside the observation field of view ("illumination spot 32"), and said area of tissue scatters the light from the light source so as to illuminate the observation field of view ("re-entrant zone 70").
- [10] With regard to claims 6 & 7: Furnish discloses an endoscope which is inherently capable of observing epithelial cells of living tissue according to a method comprising: a step in which the illumination system of the endoscope illuminates the underlying parenchymal tissues of the epithelial cells; and a step in which the illumination light emitted from the illumination system is scattered and reflected by the parenchymal tissues underlying the epithelial cells to illuminate the epithelial

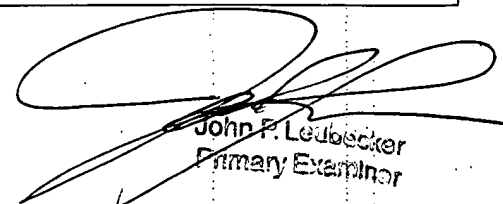
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cells.

Conclusion

- [11] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Smit (2004/0186363) discloses measurement of scattered radiation. Alfano (2004/0111031) & Gono (2003/0176768) disclose imaging at various depths.
- [12] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip R. Smith whose telephone number is (571) 272 6087 and whose email address is philip.smith@uspto.gov. The examiner can normally be reached between 9:00am and 5:00pm.
- [13] If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272 4764.
- [14] Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

[15] prs


John P. Leubecker
Primary Examiner